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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,096	03/24/2004	Hyun Jin Kim	0EKM-110592	6664

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EXAMINER

GORDON, RAEANN

ART UNIT PAPER NUMBER

3711

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,096

Applicant(s)

KIM, HYUN JIN

Examiner

Raeann Gorden

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 39 and 40 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14, 39 and 40 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-23-04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by DiEdwardo et al (4,424,307). Regarding claim 10, DiEdwardo discloses a composition comprising a polymer or copolymer and a syndiotactic 1,2-polybutadiene with more than 90% 1,2 units, an average molecular weight of more than 100,000 and a crystallinity from 15 to 25% (col 5, line 10; col 6, lines 54-59). Regarding claims 11 and 12, the ratio of the 1,2 polybutadiene and the polymer is from 1:99 to 20:80 (col 9, lines 35-42). Regarding claim 13, the ionomeric polymers do not limit the composition since they may or may not be included in the composition; see Markush grouping in claim 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

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said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Retford (3,992,014) in view of DiEdwardo et al (4,424,307). Regarding claims 1-8, Retford discloses a golf ball comprising a at least 60% cis-polybutadiene and the remainder 1,2-polybutadiene. Retford does not disclose properties of the 1,2-polybutadiene. However, DiEdwardo teaches a syndiotactic 1,2-polybutadiene with more than 90% 1,2 units, an average molecular weight of more than 100,000 and a crystallinity from 15 to 25% (col 5, line 10; col 6, lines 54-59). Regarding claim 9, Retford discloses filler materials may be included in the composition (col 3, lines 10-19). Regarding claims 10-12, Retford discloses a golf ball comprising a at least 60% cis-polybutadiene and the remainder 1,2-polybutadiene. Retford does not disclose properties of the 1,2-polybutadiene. However, DiEdwardo teaches a syndiotactic 1,2-polybutadiene with more than 90% 1,2 units, an average molecular weight of more than 100,000 and a crystallinity from 15 to 25% (col 5, line 10; col 6, lines 54-59). DiEdwardo also teaches an oxymethylene polymer is included in the composition (abstract). The ratio of the 1,2 polybutadiene and the polymer is from 1:99 to 20:80 (col 9, lines 35-42). Regarding claim 13, the ionomeric polymers do not limit the composition since they may or may not be included in the composition; see Markush grouping in claim 10. Regarding claim 14, Retford discloses also includes crosslinking agents (col 2, lines 30-35). One of ordinary skill in the art would have modified Retford with the 1,2-polybutadiene and polymer of DiEdwardo to enhance the impact and durability of the golf ball (abstract).

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Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalton (6,508,724) in view of DiEdwardo et al (4,424,307). Dalton discloses a golf ball core composition comprising a first resilient material and a second reinforcing material (col. 6, line 65-col. 7, lines 3). Dalton discloses the composition may be included in the in both dual core layers. The outer core layer is equivalent to applicant's intermediate layer. The reinforcing material may be a syndiotactic 1,2-polybutadiene (col. 10, lines 9-11). The resilient material may be a polybutadiene (non-ionomeric) (col. 7, lines 15-20). The composition also includes one or more crosslinking agents and a free radical initiator (accelerator). The composition includes from 50 to 99% of the resilient material (polybutadiene) and 1 to 40% of the reinforcing material (1,2 poly) (col. 7, lines 1-10). The crosslinkers are present in the amounts from 10 to 24 phr (col. 7, lines 50-55). Dalton doesnot disclose the properties of the syndiotactic 1,2-polybutadiene. However, DiEdwardo teaches a syndiotactic 1,2-polybutadiene with more than 90% 1,2 units, an average molecular weight of more than 100,000 and a crystallinity from 15 to 25% (col. 5, line 10;col 6, lines 54-59). One of ordinary skill in the art would have modified Dalton with the 1,2-polybutadine of DiEdwardo to enhance the impact and durability of the golf ball.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re*

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Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 10 and 14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 15 and 17 of copending Application No. 09/974,775. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '775 application anticipates claims 10 and 14 in the present invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is 703-308-8354. The examiner can normally be reached on M-F 9-5.

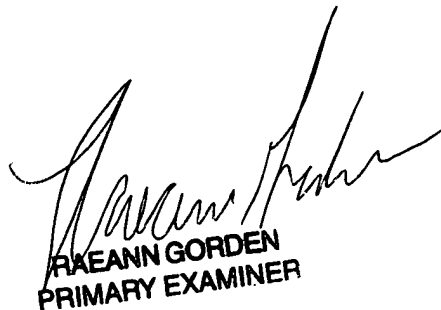
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Vidovich can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rg

September 19, 2004



RAEANN GORDEN
PRIMARY EXAMINER